medium (either liquid medium or nutrient agar plates, for instance), in order to examine whether the microbes will grow under traditional conditions.

Please replace the paragraph at Page 10, lines 12-19, with the following:

Within an array, each arrayed cell sample or mixture of cells is addressable, in that its location can be reliably and consistently determined within at least the two dimensions of the array surface. Thus, in ordered arrays the location of each cell sample is assigned to the sample at the time when it is spotted onto the array surface and usually a key is provided in order to correlate each location with the appropriate "target" cell sample. Often, ordered arrays are arranged in a symmetrical grid pattern, but samples could be arranged in other patterns (e.g., in radially distributed lines or ordered clusters).

Please replace the paragraph at Page 11, line 29 through Page 12, line 3, with the following:

Sample spots on macroarrays are of a relatively large size, for instance large enough to permit detection of a hybridization signal without the assistance of a microscope or other sophisticated enlargement equipment. Thus, spots may be as small as about 0.1 mm across, with a separation of about the same distance, and can be larger. Larger sample spots on macroarrays, for example, may be about 0.5, 1, 2, 3, 5, 7, or 10 mm across. Even larger spots may be larger than 10 mm (1 cm) across, in certain specific embodiments. The array size will in general be correlated to the size of the sample spots applied to the array, in that larger spots will usually be found on larger arrays, while smaller spots may be found on smaller arrays. This correlation is not necessary to the invention, though.

Please replace the paragraph at Page 21, lines 6-11, with the following:

Certain examples of automated array readers (scanners) will be controlled by a computer and software programmed to direct the individual components of the reader (e.g., mechanical components such as motors, analysis components such as signal interpretation and background subtraction). Optionally software may also be provided to control a graphic user interface and one or more systems for sorting, categorizing, storing, analyzing, or otherwise processing the data output of the reader.